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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,206	02/17/2004	Per Olof Magnus Magnusson	P18852-US1	9904

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ERICSSON INC.
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EXAMINER

NGUYEN, TUAN HOANG

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/780,206	MAGNUSSON ET AL.	
	Examiner	Art Unit	
	Tuan H. Nguyen	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-19, and 24-32 is/are rejected.
- 7) ☒ Claim(s) 15 and 20-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 10/05/2006 with respect to claims 1-14 and 16-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. et al. (US PUB. 2003/0161285 hereinafter, "Tiedemann") in view of Yafuso (U.S PUB. 2003/0103470).

Consider claims 1, 24, and 25, Tiedemann teaches adjusting one or more communications with a receiving unit in a wireless communication network comprising: receiving feedback information relating to the receiving unit, the feedback information relating to radio conditions between the wireless communication network and the receiving unit (page 1 [0020] and page 4 [0039]).

Tiedemann does not explicitly show that determining a feedback information offset for the receiving unit by a feedback information processor located separately from the receiving unit; and adjusting the one or more communications providing a downlink with the receiving unit based on the feedback information and the feedback information offset.

In the same field of endeavor, Yafuso teaches determining a feedback information offset for the receiving unit by a feedback information processor located separately from the receiving unit (pages 4 and 5 [0047] and [0048]); and adjusting the one or more communications providing a downlink with the receiving unit based on the feedback information and the feedback information offset (page 6 [0058]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, determining a feedback information offset for the receiving unit by a feedback information processor located separately from the receiving unit; and adjusting the one or more communications providing a downlink with the receiving unit based on the feedback information and the feedback information offset, as taught by Yafuso, in order to provide a communicating station using a closed loop technique to control its transmissions interprets feedback it receives, which may be indicia of measurements, parameters, or other computed quantities; determines signal parameters based on the feedback; and transmits a data signal in accordance with those parameters.

Consider claim 2, Tiedemann further teaches the receiving unit is a user equipment, a base station, or a device communicating with multiple user equipments (page 1 [0018]).

Consider claim 3, Tiedemann further teaches the user equipment is a cordless phone, cellular phone, satellite phone, pager, computer, personal data assistant ("PDA"), entertainment device or wireless combined function device (page 3 [0035]).

Consider claim 26, Tiedemann teaches an apparatus for adjusting one or more communications with a receiving unit in a wireless communication network comprising: a receiver that receives feedback information relating to radio conditions between the wireless communication network and the receiving unit (page 1 [0020] and page 4 [0039]).

Tiedemann does not explicitly show that a feedback information processor communicably coupled to the receiver, the feedback information processor located separate from the receiving unit, the feedback information processor determining a feedback information offset for the receiving unit and adjusting the one or more communications providing a downlink with the receiving unit based on the feedback information and the feedback information offset; and a transmitter communicably coupled to the feedback information processor that transmits the one or more communications providing a downlink to the receiving unit.

In the same field of endeavor, Yafuso teaches a feedback information processor communicably coupled to the receiver, the feedback information processor located separate from the receiving unit, the feedback information processor determining a feedback information offset for the receiving unit and adjusting the one or more communications providing a downlink with the receiving unit based on the feedback information and the feedback information offset (pages 4 and 5 [0047] and [0048]); and a transmitter communicably coupled to the feedback information processor that transmits the one or more communications providing a downlink to the receiving unit (page 6 [0058]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, a feedback information processor communicably coupled to the receiver, the feedback information processor located separate from the receiving unit, the feedback information processor determining a feedback information offset for the receiving unit and adjusting the one or more communications providing a downlink with the receiving unit based on the feedback information and the feedback information offset; and a transmitter communicably coupled to the feedback information processor that transmits the one or more communications providing a downlink to the receiving unit, as taught by Yafuso, in order to provide a communicating station using a closed loop technique to control its transmissions interprets feedback it receives, which may be indicia of measurements, parameters, or other computed quantities; determines signal parameters based on the feedback; and transmits a data signal in accordance with those parameters.

Consider claim 27, Tiedemann further teaches the receiver, the feedback information processor and the transmitter are part of a base station (page 4 [0039]).

Consider claim 28, Tiedemann teaches a system for adjusting one or more communications in a wireless communication network comprising: one or more receiving units, each receiving unit comprising a receiver, a feedback information estimator communicably coupled to the receiver and a transmitter communicably coupled to the feedback information estimator (pages 1 [0020] page 2 [0029] and page 4 [0039]); one or more base stations communicably coupled to the one or more receiving unit, each base station comprising a receiver that receives feedback information relating to radio conditions between the wireless communication network and the receiving unit (pages 1 [0020] page 2 [0029] and page 4 [0039]).

Tiedemann does not explicitly show that a feedback information processor communicably coupled to the receiver and located separate from the receiving unit, the feedback information processor determining a feedback information offset for the receiving unit and adjusting the one or more communications with the receiving unit based on the feedback information and the feedback information offset, and a transmitter communicably coupled to the feedback information processor that transmits the one or more communications providing a downlink to the receiving unit.

In the same field of endeavor, Yafuso teaches a feedback information processor communicably coupled to the receiver and located separate from the receiving unit, the

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feedback information processor determining a feedback information offset for the receiving unit and adjusting the one or more communications with the receiving unit based on the feedback information and the feedback information offset (pages 4 and 5 [0047] and [0048]), and a transmitter communicably coupled to the feedback information processor that transmits the one or more communications providing a downlink to the receiving unit (page 6 [0058]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, a feedback information processor communicably coupled to the receiver and located separate from the receiving unit, the feedback information processor determining a feedback information offset for the receiving unit and adjusting the one or more communications with the receiving unit based on the feedback information and the feedback information offset, and a transmitter communicably coupled to the feedback information processor that transmits the one or more communications providing a downlink to the receiving unit, as taught by Yafuso, in order to provide a communicating station using a closed loop technique to control its transmissions interprets feedback it receives, which may be indicia of measurements, parameters, or other computed quantities; determines signal parameters based on the feedback; and transmits a data signal in accordance with those parameters.

Consider claim 29, Tiedemann further teaches a transmit processing node communicably coupled to the one or more base stations (page 1 [0019]).

Consider claim 30, Tiedemann further teaches the transmit processing node is a radio network controller (page 3 [0031]).

Consider claim 31, Tiedemann further teaches an interface/routing node communicably coupled to the transmit processing node (page 4 [0040]).

Consider claim 32, Tiedemann further teaches the interface/routing node is a mobile switching center or public data switch node (page 3 [0031]).

4. Claims 4-5, 9, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann in view of Yafuso and further in view of Malladi et al. (U.S. PUB. 2003/0210668 hereinafter, "Malladi").

Consider claim 4, Tiedemann and Yafuso, in combination, fails to disclose the feedback information comprises an acknowledgement ("ACK"), a negative acknowledgement ("NACK"), a channel quality indication ("CQI"), a discontinuous transmission ("DTX") bit or a communication metric.

However, Malladi teaches the feedback information comprises an acknowledgement ("ACK"), a negative acknowledgement ("NACK"), a channel quality indication ("CQI"), a discontinuous transmission ("DTX") bit or a communication metric (page 4 [0057]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Malladi into view of Tiedemann and Yafuso,

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in order to enhance the system may be multiple-access systems capable of supporting communication with multiple users, and may be based on code division multiple access (CDMA), time division multiple access (TDMA), frequency division multiple access (FDMA), or some other multiple access techniques. CDMA systems may provide certain advantages over other types of system, including increased system capacity.

Consider claim 5, Malladi further teaches the feedback information offset is a positive value whenever the feedback information for the receiving unit is underestimated and a negative value whenever the feedback information for the receiving unit is overestimated (page 4 [0064]).

Consider claim 9, Malladi further teaches the wireless communication network is a WCDMA network or a CDMA2000 network (page 2 [0024]).

Consider claim 17, Malladi further teaches the step of adjusting one or more communications with the receiving unit based on the feedback information and the feedback information offset comprises the step of scheduling the one or more communications with the receiving unit using the feedback information and the feedback information offset (page 5 [0065]).

Consider claim 19, Malladi further teaches the one or more communication links are adapted by changing a data rate, a channel modulation or a power level for the one or more communication links (page 3 [0040]).

5. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann in view of Yafuso and further in view of Hwang et al. (U.S PUB. 2002/0115464 hereinafter, "Hwang").

Consider claim 6, Tiedemann and Yafuso, in combination, fails to disclose the feedback information offset comprises an initial value of zero, a value based on the receiving unit, a value based on a user profile associated with the receiving unit, a value based on historical data or a value based on one or more conditions of the wireless communication network.

However, Hwang teaches the feedback information offset comprises an initial value of zero, a value based on the receiving unit, a value based on a user profile associated with the receiving unit, a value based on historical data or a value based on one or more conditions of the wireless communication network (page 10 [0119]).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Hwang into view of Tiedemann and Yafuso, in order to provide transmission power control on a downlink shared channel used in an asynchronous Wideband Code Division Multiple Access mobile communication system, and in particular, to an apparatus and method for controlling transmission power by

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transmitting a transmit format combination indicator in a period of a downlink dedicated physical channel assigned to a User Equipment which uses the DSCH in a handover (or handoff) zone.

Consider claim 10, Hwang further teaches the step of setting the feedback information offset to an initial value (page 11 [0123]).

6. Claims 7-8, 11-14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann in view of Yafuso, and further in view of Leslie (U.S. PAT. 5,115,514).

Consider claim 7, Tiedemann and Yafuso, in combination, fails to disclose the feedback information offset is not higher than a maximum value and is not less than a minimum value.

However, Leslie teaches the feedback information offset is not higher than a maximum value and is not less than a minimum value (col. 10 lines 34-49).

Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Leslie into view of Tiedemann and Yafuso, in order to enhance for selecting one or more of a plurality of cellular mobile communications signals which would benefit from being boosted.

Consider claim 8, Leslie further teaches the feedback information offset comprises a communication link adaptation feedback information offset and a scheduling feedback information offset (col. 25 lines 44-62).

Consider claim 11, Leslie further teaches the step of adjusting one or more communications with the receiving unit based on the feedback information and the feedback information offset comprises the steps of: determining a load-based feedback information offset for the receiving unit (col. 6 line 59 through col. 7 line 2); and adjusting one or more communications with the receiving unit based on the feedback information, the feedback information offset and the load-based feedback information offset (col. 12 lines 33-43).

Consider claim 12, Leslie further teaches the step of determining the feedback information offset for the receiving unit comprises the steps of: increasing the feedback information offset whenever the feedback information includes a negative acknowledgement ("NACK") (col. 16 lines 55-68); and decreasing the feedback information offset whenever the feedback information includes an acknowledgement ("ACK") (col. 16 lines 55-68).

Consider claim 13, Leslie further teaches the feedback information offset is increased or decreased in uniform increments, predetermined increments, scaled

increments or calculated increments (col. 16 lines 55-68).

Consider claim 14, Leslie further teaches the increments depend on a fixed value, a value based on the receiving unit, a value based on a user profile associated with the receiving unit, a value based on historical data, a value derived from feedback information received from the receiving unit or a value based on one or more conditions of the wireless communication network (col. 24 lines 23-36).

Consider claim 16, Leslie further teaches the step of determining the feedback information offset for the receiving unit comprises the steps of: increasing the feedback information offset whenever an actual number and/or an average number of transmissions is less than a minimum limit; and decreasing the feedback information offset whenever the actual number and/or average number of transmissions is greater than a maximum limit (col. 16 lines 55-68).

Consider claim 18, Leslie further teaches the step of adjusting one or more communications with the receiving unit based on the feedback information and the feedback information offset comprises the step of adapting one or more communication links with the receiving unit using the feedback information and the feedback information offset (col. 25 lines 44-62).

Allowable Subject Matter

7. Claims 15 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any response to this action should be mailed to:

Mail Stop _____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571)272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571)272-7882882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen
Examiner
Art Unit 2618

T.N

Quochien B. Vuong 2/20/07
QUOCHIE B. VUONG
PRIMARY EXAMINER